# I. FLOW BASE EVALUATION



# A. Summary

| Previous Permit Flow Base | New Flow Base | Effective Date |
|---------------------------|---------------|----------------|
| 5000 gpd                  | 5000 gpd      | 6/1/2013       |

There is no significant change in the discharge flow; therefore, the previous permit flow base remains effective for this permit.

## **B. Flow Base Calculation**

The flow base should represent actual discharge from the facility assuming that appropriate wastewater controls, that prevent excessive use of water or dilution, are in place. Excessive use of water to dilute wastewater discharge as partial or complete substitute for treatment to achieve compliance, or to establish an artificially high flow rate to increase permit mass emission limits is prohibited by OCSD's Ordinance.

Generally, the flow base is derived based on any or combination of the following information:

- Statistical average, trend and projection of historical flow data. These data may be considered not representative if there are indications of dilution or excessive water use.
- Flow estimate based on volumetric flow rates from wastewater generating processes for new facilities where historical data are not available, or for existing facilities with excessive water usage where historical data are not representative. Typically, acceptable rinse flows from metal finishing facilities range from 3 to 5 gpm.
- Other factors, such as the most recent representative flows and current information relevant to the determination of the flow base.

The following flow information was used in determining the flow base by assigning corresponding weights commensurate to the relevance and accuracy of the flow data:

| Basis of Flow                     | Historical Flows Based on last 3 year's data (GPD) | Net Weighted<br>Flow<br>(GPD) | Weight % | Justification  |
|-----------------------------------|--|-------------------------------|----------|--|
| Onsite Sampling<br>Average Flow   | 3900   | 3800                          | 50       | Onsite flow determination method is acceptable; (incoming flow measurement with reasonable losses).  Onsite Sampling data are acceptable based on reasonable water usage (not inflated); acceptable water reduction controls in place.  Data points show an average scatter (as opposed to increasing/decreasing trend). |
| Onsite Sampling<br>Projected Flow | 3430   |                               |          | Data points show more of an average trend rather than an increasing/decreasing trend.  |

| Other Factors                                  |      | en America | N/A |  |  |
|--|------|------------|-----|--|--|
| Most Recent Flow                               |      |            | N/A |  |  |
| Estimated Flow (based on the number of rinses) |      |            | N/A |  |  |
| Reconciliation<br>Projected Flow               | 6900 |            |     | Data points show more of an average trend rather than an increasing/decreasing trend.  |  |
| Reconciliation<br>Average Flow                 | 6230 | 6400       | 50  | Recon flow estimation method is acceptabl (incoming flow measurement with reasonab losses).  Reconciliation data are acceptable based or reasonable water usage (not inflated acceptable water reduction controls in place.  Data points show an average scatter (a opposed to increasing/decreasing trend). |  |

GPD = gallons per day

# C. Basis for Deriving Flow Base

# ♦ Data Sets Excluded from Evaluation

Not applicable.

# **♦ Data Points Excluded from Evaluation**

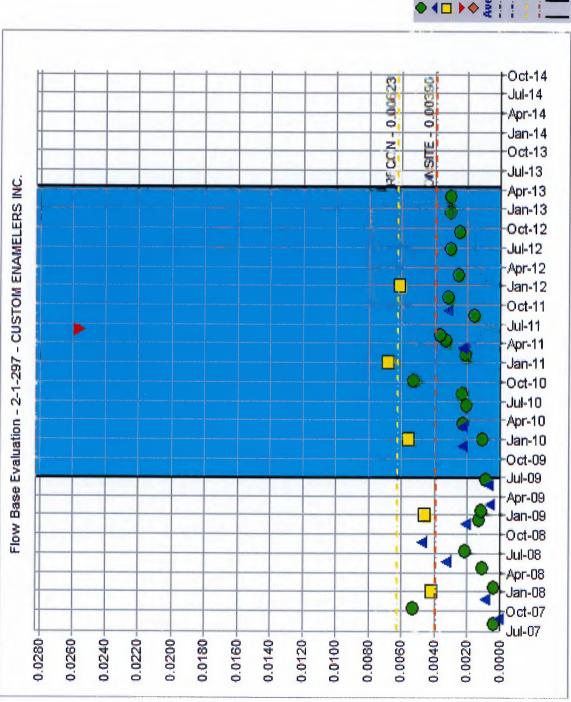
Typically all flow data is representative of the production discharge on the day that the samples collected. However, on occasion, the recorded daily effluent flow volume exceeds the range of measured effluent flow over the entire review period. These data are excluded from consideration in the final flow base determination for the reasons specified below.

| Sample Date | Flow and  | Sample Type |     | Reason   |
|-------------|-----------|-------------|-----|--|
| Sample Date | Flow, gpd | OCSD        | SMR | Reason   |
| 6/7/2011    | 25,600    |             | √   | Potential Outlier Exclusion Test: Lower: 0 Upper: 0.0195 |

# Average and Projected Flows

|                            |             |      | 1         |           |           | — Т                        |                     |                    |
|----------------------------|-------------|------|-----------|-----------|-----------|----------------------------|---------------------|--------------------|
| Reconcilia-                | tion Flow,  | pdb  | 5,600     | 6,900     | 6,200     | 6,230                      | (She, constitution) |                    |
|                            |             | Low  | 1,100     | 2,200     | 1,600     |                            |                     |                    |
|                            | OCSD+SMR    | Ave  | 2,000     | 3,200     | 2,700     | 3,900                      | 300 S<br>m 50       |                    |
|                            |             | High | 2,300     | 5,300     | 3,200     |                            |                     |                    |
|                            | 112         | Low  | 2,300     | 2,300     | 3,200     |                            |                     |                    |
|                            | SMR         | Ave  | 2,300     | 2,300     | 3,200     |                            |                     |                    |
| Flows, gpd                 |             | High | 2,300     | 2,300     | 3,200     |                            |                     |                    |
| Onsite Sampling Flows, gpd |             | Low  | 1,100     | 2,200     | 1,600     |                            |                     |                    |
| Ons                        | OCSD        | Ave  | 1,800     | 3,400     | 2,600     |                            |                     |                    |
|                            |             | High | 2,300     | 5,300     | 3,200     |                            |                     |                    |
|                            |             | Low  |           |           |           |                            |                     |                    |
|                            | MRF         | Ave  |           |           | :         |                            |                     |                    |
|                            |             | High |           |           |           |                            |                     |                    |
|                            | Fiscal Year | 1    | 2009-2010 | 2010-2011 | 2011-2012 | Overall<br>Average<br>Flow | Projected<br>Flow   | Projection<br>Date |





Plot of all Data Sets Considered

Page :

Permit No. 2-1-297 CUSTOM ENAMELERS INC. FBE 920130417

Not applicable.

# II. EFFLUENT DISCHARGE CONFIGURATION



Effluent discharge from a permittee must be accurately measured for two purposes. The effluent volume from the production process is used to calculate mass emission rates which determine compliance with Wastewater Discharge Limits. Industrial effluent volume from the facility is also used to calculate sewerage use fees. For both end results, it is imperative that a meter is appropriately located in the supply water line or effluent line. In some cases multiple meters may be installed at the location; however, only one meter type may be used for measuring effluent for Wastewater Analysis Report and/or User Charges.

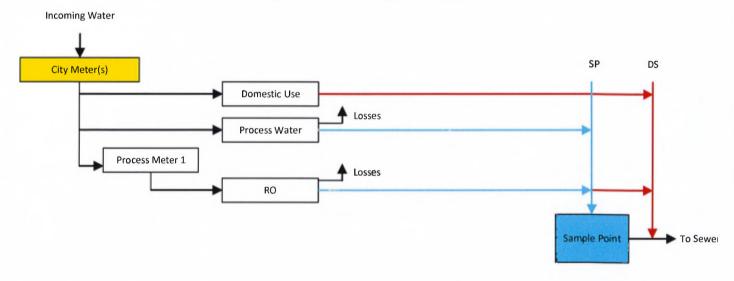
At Custom Enamelers the following meters are installed but may not be in active service:

| Meter         | Meter ID   | Units | Location  |
|---------------|------------|-------|---|
| City Meter    | 7137073019 | CF    | South front corner of facility.                               |
| Process Meter | 2-01087    | G     | R.O. unit   |
| Process Meter | 2-00237    | CF    | Adjacent to the outdoor wash pad.                             |
| Process Meter | 2-00236    | G     | Inside the building, adjacent to the automatic cleaning line. |

These meters are active at the facility described by the schematic in Figure 1 (see below).

Company name: CUSTOM ENAMELERS INC.

Permit No: 2-1-297
Waste/Wastewater Flow Diagram as of 6/1/2013



Comments: There is a second process meter located outside next to the concrete wash pad. It measures the water indicated as process water through the city meter.

Although Custom Enamelers may discharge commingled wastewater from dilution and manufacturing processes through the industrial sample point, the dilution streams in this case are regarded as having insignificant volume. Therefore, the CWF will not be used to compute alternate discharge limits this permit cycle.

# A. DECLARATION OF ACCEPTABLE METER(S)

For the proposed configuration at Custom Enamelers, the following meter(s) have been determined appropriate for measuring effluent for Wastewater Analysis purposes:

| Meter                 | eter Meter ID |    | Location                          |  |  |
|-----------------------|---------------|----|-----------------------------------|--|--|
| Process Meter 2-00237 |               | CF | Adjacent to the outdoor wash pad. |  |  |
| Process Meter         | 2-01087       | G  | R.O. unit                         |  |  |

For the proposed configuration at Custom Enamelers, the following meter(s) have been determined appropriate for measuring effluent for User Charges purposes:

| Meter      | Meter ID   | Measurement<br>Units | Location                        | 175 |
|------------|------------|----------------------|---------------------------------|-----|
| City Meter | 7137073019 | CF                   | South front corner of facility. |     |

# **B. SPECIAL CONDITIONS**

No special conditions as a result of the Effluent Discharge Configuration analysis.

# III. CATEGORY EVALUATION (CE)



# A. Identification as A Significant industrial user

Classification of a wastewater discharger as a Significant Industrial User (SIU) is based upon four criteria:

- 1. Subject to Federal Categorical Pretreatment Standards; or
- 2. Discharging wastewater which averages 25,000 gallons per day or more regulated process water; or
- 3. Discharges wastewater determined by the District to have a reasonable potential for adversely affecting the District's operation or for violating any pretreatment standard, local limits, or discharge requirement; or
- 4. Discharging wastewater which may cause, as determined by the General Manager, pass through or interference with the District's system.

Based on a review of the manufacturing operations, the effluent volume data, and other pertinent information, the District concludes that Custom Enamelers is an SIU based upon the following information:

average daily production discharge of 25,000 gallons per day (or more).

# B. Identification of Federal Category

Based on a review of the pertinent facility details, the District finds that Custom Enamelers is appropriately regulated by the Federal Effluent Guidelines presented below:

| Category        | Subcategory Name               |  |
|-----------------|--------------------------------|--|
| Metal Finishing | Subpart A-Metal Finishing PSNS |  |

The District believes that an adequate review of the pertinent facts supports this determination and no other Federal Effluent Guidelines apply.

### **Explanation of Applicability:**

"New Source" regulations are applied to this permit because the manufacturing operations commenced on or after August 31, 1982 - the new source date for the "Metal Finishing, Subpart A-Metal Finishing" subcategory.

CUSTOM ENAMELERS INC. (Custom Enamelers) performs surface finishing aluminum, cold-rolled steel, and galvanized steel parts. This facility is a medium volume job shop that conducts powdercoat, water-based, and solvent-based painting on customer-supplied parts and components for aerospace, automotive, commercial/industrial, computer, electronics, and military/defense applications. Other service operations include silk-screen printing.

The preparation of the aluminum and steel parts typically begins on the conveyorized wet process line which consists of a single iron phosphate tank to simultaneously clean and produce the phosphate surface conversion necessary for paint adhesion. This is followed by three counterflow rinses and a drying oven. Depending on the size, quantity, or paint specification, the parts either continue on the conveyorized line for powdercoat application or are directed to one of the batch paint booths. Following paint application, the parts proceed to one of the drying ovens for curing. As specified, the parts may undergo an additional screen printing operation. The completed parts receive a final inspection before packaging and shipping.

The effluent discharge at Custom Enamelers is generated by iron phosphate rinse wastestream. The iron phosphate solution is wastehauled approximately once annually. A very small quantity of water is generated on the washpad behind the building, where stripped hooks are rinsed. During this permit renewal, it was noted that the caustic strip tank is no longer in use, reportedly because it developed a leak. Hooks are now stripped in a 55-gallon drum. Also, due to concerns voiced during the previous permit renewal inspection, Custom Enamelers sealed the floor drain in the restroom, and plumbed compressor condensate to the clarifier. RO reject is plumbed downstream of the sample point. The operations are housed in one building.

Operation(s) that do not generate wastewater include masking, hole plugging, glass-bead & sand blasting, and silk-screen printing.

Waste/Wastewater generating operation(s) include caustic stripping, iron phosphate conversion, spray rinsing, and stream-cleaning.

# C. Identification of Primary Category

For purposes of reporting, Orange County Sanitation District identifies a primary category for each permitted discharger. This "primary" category represents the manufacturing process which is determined to contribute the most contaminant loading to the final effluent. Identification of the primary category should not be construed as relief from regulatory requirement of other applicable categorical regulations.

This primary category represents either the entire manufacturing process; or in cases of multiple category applicability (when the combined wastestream formula is implemented) – the major manufacturing category. At Custom Enamelers, Metal Finishing, Subpart A-Metal Finishing PSNS i.e. 433.17 is identified as the primary category.

| Permit No.      | 2-1-297  | Company Name: | CUSTOM ENAMELERS INC. |
|-----------------|----------|---------------|-----------------------|
| Effective Date: | 1/1/1002 |               |                       |

# DATA ENTRY FORM FOR OPTIONAL FIELDS

| Constituents         | Effective | Code    | Concentrations, mg/l |       |         | Mass Emission, Ibs/day |       |         |
|----------------------|-----------|---------|----------------------|-------|---------|------------------------|-------|---------|
| Constituents         | Date      | P, C, B | Daily                | 4-Day | Monthly | Daily                  | 4-Day | Monthly |
| Arsenic              | 1/1/1992  |         | 2                    |       |         | 0.083                  |       |         |
| BOD                  | 1/1/1992  |         |                      |       |         | 15000                  |       | 10000   |
| CN(A)                | 1/1/1992  |         | 1                    |       |         | 0.042                  |       |         |
| CN(T)                | 1/1/1992  |         | 1.2                  |       | 0.65    | 0.050                  |       |         |
| Cadmium              | 1/1/1992  |         | 0.11                 |       | 0.07    | 0.005                  |       |         |
| Chromium             | 1/1/1992  |         | 2                    |       | 1.71    | 0.083                  |       |         |
| Copper               | 1/1/1992  |         | 3                    |       | 2.07    | 0.125                  |       |         |
| Dissolved Sulfides   | 1/1/1992  |         | 0.5                  |       |         | 0.021                  |       |         |
| Lead                 | 1/1/1992  |         | 0.69                 |       | 0.43    | 0.029                  |       |         |
| Mercury              | 1/1/1992  |         | 0.03                 |       |         | 0.001                  |       |         |
| Nickel               | 1/1/1992  |         | 3.98                 |       | 2.38    | 0.166                  |       |         |
| Oil & Grease Min.    | 1/1/1992  |         | 100                  |       |         | 4.170                  |       |         |
| PCB                  | 1/1/1992  |         | 0.01                 |       |         | 0.000                  |       |         |
| Pesticides           | 1/1/1992  |         | 0.01                 |       |         | 0.000                  |       |         |
| Silver               | 1/1/1992  |         | 0.43                 |       | 0.24    | 0.018                  |       |         |
| Total Sulfides       | 1/1/1992  |         | 5                    |       |         | 0.209                  |       |         |
| Total Toxic Organics | 1/1/1992  |         | 0.58                 |       |         | 0.024                  |       |         |
| Zinc                 | 1/1/1992  |         | 2.61                 |       | 1.48    | 0.109                  |       |         |

| Constituents                            | Sample Type | Monitoring Frequency | Reason* | Effective Date | End Date   |
|---|-------------|----------------------|---------|----------------|------------|
| Heavy Metals: Silver                    |             |                      |         |                |            |
| Cadmium                                 |             |                      |         |                |            |
| Chromium                                |             |                      |         |                |            |
| Copper                                  |             |                      |         |                |            |
| Nickel                                  |             |                      |         |                |            |
| Lead                                    |             |                      |         |                |            |
| Zinc                                    |             |                      |         |                |            |
| BOD/TSS                                 |             |                      |         |                |            |
| Oil & Grease (M)                        |             |                      |         |                |            |
| Total Toxic Organics (TTO) (Method 624) | G           | S                    | R       | 06/01/2013     | 05/31/2015 |

<sup>\*</sup>Reasons: Routine, Enforcement, ECSA, Probation, Use Fees

| REPO  | RTING REQUIREMENTS FOR METER I | READINGS       |          |
|---|--------------------------------|----------------|----------|
| Constituents                                | Monitoring Frequency           | Effective Date | End Date |
| Effluent Meter Read (for User Charges only) | M                              |                |          |
| Process Meter Read (for User Charges only)  | M                              |                |          |
| Batch Read (for User Charges only)          | M                              |                |          |



# **TECHNICAL REVIEW OF COMPLIANCE**

For the Period April 01, 2011 thru March 31, 2013

# CUSTOM ENAMELERS INC. 18340 MT. BALDY CIR. FOUNTAIN VALLEY

Permit No: 2-1-297

PPIR Inspection Date: April 17, 2013

Prepared by: Walker, Thomas April 17, 2013

### TABLE OF CONTENTS

| V. TEC | CHNICAL REVIEW OF COMPLIANCE   | 2 |
|--------|--|---|
| A.     | DESCRIPTION OF FACILITY OPERATIONS   | 2 |
| В.     | OVER-ALL COMPLIANCE WITH FEDERAL CATEGORICAL PRETREATMENT STANDARDS                | 3 |
| C.     | COMPLIANCE WITH FEDERAL STANDARDS FOR HEAVY METALS                                 | 5 |
| D.     | COMPLIANCE WITH FEDERAL STANDARDS FOR CYANIDE                                      | 6 |
| E.     | COMPLIANCE WITH FEDERAL STANDARDS FOR TOTAL TOXIC ORGANICS                         | 6 |
| F.     | COMPLIANCE WITH LOCAL LIMITS   | 7 |
| G.     | COMPLIANCE WITH FEDERAL PROHIBITION AGAINST DILUTION AS A SUBSTITUTE FOR TREATMENT | 8 |
| H.     | COMPLIANCE WITH THE REQUIREMENTS TO CONDUCT SELF-MONITORING                        | 9 |

# V. TECHNICAL REVIEW OF COMPLIANCE



# A. DESCRIPTION OF FACILITY OPERATIONS

CUSTOM ENAMELERS INC. (Custom Enamelers) performs surface finishing on aluminum, cold-rolled steel, and galvanized steel parts. This facility is a medium volume job shop that conducts powdercoat, water-based, and solvent-based painting on customer-supplied parts and components for aerospace, automotive, commercial/industrial, computer, electronics, and military/defense applications. Other service operations include silk-screen printing.

The preparation of the aluminum and steel parts typically begins on the conveyorized wet process line which consists of a single iron phosphate tank to simultaneously clean and produce the phosphate surface conversion necessary for paint adhesion. This is followed by three counterflow rinses and a drying oven. Depending on the size, quantity, or paint specification, the parts either continue on the conveyorized line for powdercoat application or are directed to one of the batch paint booths. Following paint application, the parts proceed to one of the drying ovens for curing. As specified, the parts may undergo an additional screen printing operation. The completed parts receive a final inspection before packaging and shipping.

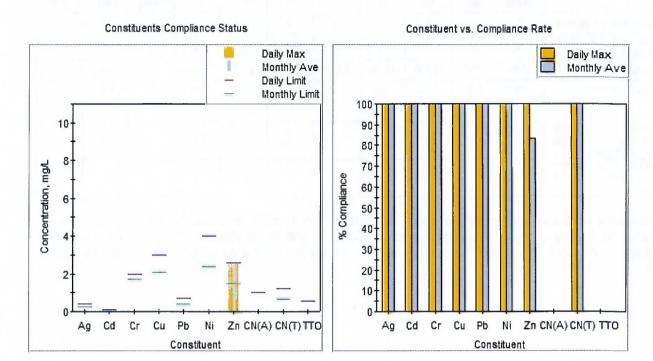
The effluent discharge at Custom Enamelers is generated by iron phosphate rinse wastestream. The iron phosphate solution is wastehauled approximately once annually. A very small quantity of water is generated on the washpad behind the building, where stripped hooks are rinsed. During this permit renewal, it was noted that the caustic strip tank is no longer in use, reportedly because it developed a leak. Hooks are now stripped in a 55-gallon drum. Also, due to concerns voiced during the previous permit renewal inspection, Custom Enamelers sealed the floor drain in the restroom, and plumbed compressor condensate to the clarifier. RO reject is plumbed downstream of the sample point. The operations are housed in one building.

Operation(s) that do not generate wastewater include masking, hole plugging, glass-bead & sand blasting, and silk-screen printing.

Waste/Wastewater generating operation(s) include caustic stripping, iron phosphate conversion, spray rinsing, and stream-cleaning.

Due to the manufacturing and production processes onsite at Custom Enamelers the metal finishing (ns) regulations apply (433.17).

# B. OVER-ALL COMPLIANCE WITH FEDERAL CATEGORICAL PRETREATMENT STANDARDS



# Daily Maximum Discharge Limits

| Dail   | y Maxim | um Comp  | oliance S  | tatistics f  | or the Pe  | riod Apr   | 01, 2011   | to Mar 3 | 1, 2013 |                            |       |
|--|---------|--|--|--|--|--|--|----------|---------|----------------------------|-------|
|  | All HM  | Ag   | Cd   | Cr   | Cu   | Pb   | Ni   | Zn       | CN(A)   | CN(T)                      | TTO   |
| No. of Composite Samples in Violation                | 0       | 0  | 0  | 0  | 0  | 0  | 0  | 0        | 0       | 0                          | 0     |
| No. of Composite Samples<br>Analyzed                 | 112     | 16   | 16   | 16   | 16   | 16   | 16   | 16       | 0       | 2                          | 0     |
| Compliance Rate (%)                                  | 100.00  | 100.00   | 100.00   | 100.00   | 100.00   | 100.00   | 100.00   | 100.00   |         | 100.00                     |       |
| Concentration, mg/L                                  | High    | <dl< td=""><td><dl< td=""><td><dl< td=""><td>0.04</td><td><dl< td=""><td>0.03</td><td>2.56</td><td></td><td><dl< td=""><td></td></dl<></td></dl<></td></dl<></td></dl<></td></dl<>                           | <dl< td=""><td><dl< td=""><td>0.04</td><td><dl< td=""><td>0.03</td><td>2.56</td><td></td><td><dl< td=""><td></td></dl<></td></dl<></td></dl<></td></dl<>                           | <dl< td=""><td>0.04</td><td><dl< td=""><td>0.03</td><td>2.56</td><td></td><td><dl< td=""><td></td></dl<></td></dl<></td></dl<>                           | 0.04   | <dl< td=""><td>0.03</td><td>2.56</td><td></td><td><dl< td=""><td></td></dl<></td></dl<>              | 0.03   | 2.56     |         | <dl< td=""><td></td></dl<> |       |
|  | Ave     | 0  | 0  | 0  | 0.01   | 0  | 0.01   | 0.51     |         | 0                          |       |
|  | Low     | <dl< td=""><td><dl< td=""><td><dl< td=""><td><dl< td=""><td><dl< td=""><td><dl< td=""><td>0.03</td><td></td><td><dl< td=""><td></td></dl<></td></dl<></td></dl<></td></dl<></td></dl<></td></dl<></td></dl<> | <dl< td=""><td><dl< td=""><td><dl< td=""><td><dl< td=""><td><dl< td=""><td>0.03</td><td></td><td><dl< td=""><td></td></dl<></td></dl<></td></dl<></td></dl<></td></dl<></td></dl<> | <dl< td=""><td><dl< td=""><td><dl< td=""><td><dl< td=""><td>0.03</td><td></td><td><dl< td=""><td></td></dl<></td></dl<></td></dl<></td></dl<></td></dl<> | <dl< td=""><td><dl< td=""><td><dl< td=""><td>0.03</td><td></td><td><dl< td=""><td></td></dl<></td></dl<></td></dl<></td></dl<> | <dl< td=""><td><dl< td=""><td>0.03</td><td></td><td><dl< td=""><td></td></dl<></td></dl<></td></dl<> | <dl< td=""><td>0.03</td><td></td><td><dl< td=""><td></td></dl<></td></dl<> | 0.03     |         | <dl< td=""><td></td></dl<> |       |
| Mass Emission, Ibs                                   | High    |  |  |  | 0.003  |  | 0.002  | 0.083    |         |                            |       |
|  | Ave     | 0  | 0  | 0  | 0  | 0  | 0  | 0.01     |         | 0                          |       |
| Daily Concentration Limits<br>(January 1, 1992)      | mg/l    | 0.43   | 0.11   | 2.00   | 3.00   | 0.69   | 3.98   | 2.61     | 1.00    | 1.20                       | 0.58  |
| Daily Mass Emission Rate<br>Limits (January 1, 1992) | lbs     | 0.018  | 0.005  | 0.083  | 0.125  | 0.029  | 0.166  | 0.109    |         |                            | 0.024 |

Discharge from Custom Enamelers during the period April 1, 2011 to March 31, 2013 complied in all heavy metal composite samples analyzed, and in all cyanide (total) manual composite samples analyzed. No Total Toxic Organics manual composites samples were obtained during this period. In contrast, the models used in setting the standards achieved a compliance rate of 99%. The 1994 "Model Industrial User Study" conducted by EPA Region 9 confirmed that about 60% of the industries that installed and properly operated model treatment exceeded a compliance rate of 91.67 % (no more than 1 violation in 12 samples) and most of those had no violations at all.

# ♦ Monthly Average Discharge Limits

| Mon   | thly Aver | age Com | pliance ( | Statistics | for the P | eriod Ap | r 01, 201 | 1 to Mar | 31,2013 | 14.11.17 | 13  |
|---|-----------|---------|-----------|------------|-----------|----------|-----------|----------|---------|----------|-----|
|   | All HM    | Ag      | Cd        | Cr         | Cu        | Pb       | Ni        | Zn       | CN(A)   | CN(T)    | TTO |
| No. of Months in Violation                                | 2         | 0       | 0         | 0          | 0         | 0        | 0         | 2        | 0       | 0        | 0   |
| Total No. of Months considered                            | 12        | 12      | 12        | 12         | 12        | 12       | 12        | 12       | 0       | 2        | 0   |
| Compliance Rate (%)                                       | 83.33     | 100.00  | 100.00    | 100.00     | 100.00    | 100.00   | 100.00    | 83.33    |         | 100.00   |     |
| Concentration, mg/L                                       | High      | 0.00    | 0.00      | 0.00       | 0.04      | 0.00     | 0.03      | 2.56     |         | 0.00     |     |
|   | Ave       | 0       | 0         | 0          | 0.01      | 0        | 0.01      | 0.63     |         | 0        |     |
| Monthly Average<br>Concentration (January 1, 1992)        | mg/l      | 0.24    | 0.07      | 1.71       | 2.07      | 0.43     | 2.38      | 1.48     |         | 0.65     |     |
| Monthly Mass Emission<br>Rate Limits (January 1,<br>1992) | lbs       |         |           |            |           |          |           |          |         |          |     |

Discharge from Custom Enamelers during the period April 1, 2011 to March 31, 2013 complied in 10 (83%) of 12 heavy metal composite samples analyzed, and in all cyanide (total) manual composite samples analyzed. In contrast, the models used in setting the standards achieved a compliance rate of 99%.

# C. COMPLIANCE WITH FEDERAL STANDARDS FOR HEAVY METALS

| 1    | Voncomp | oliant Co | mposite | e Samp | ling Re | sults f | or Hea | vy Meta | als for t | he per | iod Apr | 01, 20 | 11 thru | Mar 3 | 1, 2013 | 3    |
|------|---------|-----------|---------|--------|---------|---------|--------|---------|-----------|--------|---------|--------|---------|-------|---------|------|
| Date | Volume  | Sample    | Ag (    | Over   | Cd(     | Over    | Cr (   | )ver    | Cu (      | Over   | Pb (    | Over   | Ni C    | )ver  | Zn (    | Эver |
| Date | GPD     | Туре      | mg/l    | Lbs    | mg/l    | Lbs     | mg/l   | Lbs     | mg/l      | Lbs    | mg/l    | Lbs    | mg/l    | Lbs   | mg/l    | Lbs  |
| None | None    | None      | None    | None   | None    | None    | None   | None    | None      | None   | None    | None   | None    | None  | None    | None |

Although Custom Enamelers does not have a pretreatment system equivalent in design to the models used in originally setting the Federal Standards for heavy metals, no violation has been observed. This is reasonably expected because Custom Enamelers does not generate regulated heavy metal pollutants that need treatment prior to discharge to the sewer. Custom Enamelers is included among other categorical dischargers that do not need treatment such as powdercoaters, steel phosphaters, semiconductor plants, pharmaceuticals without cyanide and paper mills without chlorinated phenolics.

# D. COMPLIANCE WITH FEDERAL STANDARDS FOR CYANIDE

| None | compliant C | omposite S | ampling R | esults for ( | Cyanide fo | or the perio | od Apr 01, | 2011 thru | Mar 31, 2 | 2013     |
|------|-------------|------------|-----------|--------------|------------|--------------|------------|-----------|-----------|----------|
| Data | Volume      | Sample     | aras .    | CN           | (A)        |              | Gr. 187    | CN        | (T)       |          |
| Date | GPD         | Type       | mg/l      | mg/l over    | lbs        | lbs over     | mg/l       | mg/l over | lbs       | lbs over |
| None | None        | None       | None      | None         | None       | None         | None       | None      | None      | None     |

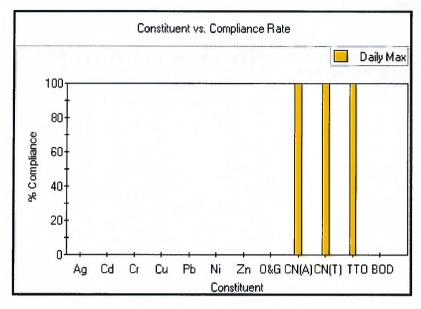
Although Custom Enamelers does not have a cyanide pretreatment system equivalent in design to the models used in originally setting the Federal Standards, no violations have been observed. This is expected reasonably because Custom Enamelers does not generate cyanide pollutants that need treatment prior to discharge to the sewer.

# E. COMPLIANCE WITH FEDERAL STANDARDS FOR TOTAL TOXIC ORGANICS

| Noncor | npliant Composite | Sampling Results | for TTOs for the | e period Apr 01, | 2011 thru Mar 31 | , 2013   |
|--------|-------------------|------------------|------------------|------------------|------------------|----------|
| Dete   | Volume CDD        | Comple Trees     |                  | TT               | Os               |          |
| Date   | Volume GPD        | Sample Type      | mg/l             | mg/l over        | lbs              | lbs over |
| None   | None              | None             | None             | None             | None             | None     |

Custom Enamelers complies with its total toxic organics standard by eliminating the use of any toxic organics in its facility. Under the Total Toxic Organics Program, Custom Enamelers has certified that TTOs are not used or present in the facility. The Certification of Non-Use of TTOs is renewed semi-annually as part of the program.

# F. COMPLIANCE WITH LOCAL LIMITS



| Compliar   | nce Statis     | tics for | Instanta | aneous | Local L | imits fo | r the Pe | eriod Ap | r 01, 20 | 011 thru   | Mar 31   | , 2013                     |     |
|--|----------------|----------|----------|--------|---------|----------|----------|----------|----------|--|--|----------------------------|-----|
|  | All<br>Samples | Ag       | Cd       | Cr     | Cu      | Pb       | Ni       | Zn       | O&G      | CN(A)  | CN(T)  | TTO                        | BOD |
| No. of Grab<br>Samples In Violation                | 0              | 0        | 0        | 0      | 0       | 0        | 0        | 0        | 0        | 0  | 0  | 0                          | 0   |
| No. of Grab<br>Samples Analyzed                    | 11             | 0        | 0        | 0      | 0       | 0        | 0        | 0        | 0        | 5  | 2  | 4                          | 0   |
| % Compliance with<br>Local Limits                  | 100.00         |          |          |        |         |          |          |          |          | 100.00   | 100.00   | 100.00                     |     |
| Concentration, mg/L                                | High           |          |          |        |         |          |          |          |          | <dl< td=""><td><dl< td=""><td><dl< td=""><td></td></dl<></td></dl<></td></dl<> | <dl< td=""><td><dl< td=""><td></td></dl<></td></dl<> | <dl< td=""><td></td></dl<> |     |
| Concentration, mg/L                                | Ave            |          |          |        |         |          |          |          |          | 0  | 0  | 0                          |     |
| Daily Concentration<br>Limits (January 1,<br>1992) | mg/l           | 5.00     | 1.00     | 2.00   | 3.00    | 2.00     | 10.00    | 10.00    | 100      | 1.00   | 5.00   | 0.58                       |     |

Custom Enamelers consistently complied with the local limits for heavy metals, cyanide (amenable & total), total toxic organics, oil & grease, and BOD.

# G. COMPLIANCE WITH FEDERAL PROHIBITION AGAINST DILUTION AS A SUBSTITUTE FOR TREATMENT

Based on inspection and evaluation of the operations and waste management practices in the facility, there is no evidence of dilution as a substitute for treatment.

# COMPLIANCE WITH THE REQUIREMENTS TO CONDUCT SELF-MONITORING ij

|              | Self-Monitoring Requirements for the period Apr 01, 2011 thru Mar 31, 2013 | toring R | equiren  | nents fo | r the pe | riod Ap | r 01, 20 | 11 thru | Mar 31 | 2013  |     |     |     |
|--------------|--|----------|----------|----------|----------|---------|----------|---------|--------|-------|-----|-----|-----|
| Qtr          | Number of Self-<br>Monitoring  | Ag       | Cd       | C        | Cu       | Pb      | ï        | Zn      | CN(A)  | CN(T) | TTO | BOD | 624 |
| Q4/2010-2011 | Required   | 1        | 1        | 1        | 1        | 1       | 1        | 1       | ı/u    | 1     | J/U | n/r |     |
|              | Done   | 1        | 1        | 1        | 1        | 1       | 1        | -       | J/U    | 1     | J/u | n/r |     |
| Q1/2011-2012 | Required   | -        | 1        | 1        | 1        | -       | 1        | 1       | n/r    | n/r   | n/r | n/r |     |
|              | Done   | 1        | 1        | -        | +        | -       | -        | -       | n/r    | n/r   | n/r | n/r |     |
| Q2/2011-2012 | Required   | -        | <b>-</b> | -        | -        | -       | -        | -       | n/r    | 1     | n/r | n/r |     |
|              | Done   | -        | 1        | -        | -        | -       | -        | -       | n/r    | -     | n/r | n/r |     |
| Q3/2011-2012 | Required   | -        | 1        | -        | -        | -       | 1        | 1       | ı/u    | n/r   | ı/ı | n/r |     |
|              | Done   | -        | 1        | -        | 1        | -       | 1        | 1       | ı/u    | J/U   | ı/u | n/r |     |
| Q4/2011-2012 | Required   | -        | 1        |          | 1        | +       | 1        | 1       | n/r    | 1     | n/r | n/r |     |
|              | Done   | 1        | 1        | 1        | 1        | -       | 1        | 1       | n/r    | 1     | n/r | n/r |     |
| Q1/2012-2013 | Required   | -        | -        | 1        | -        | -       | 1        | 1       | n/r    | ı/u   | n/r | n/r |     |
|              | Done   | 1        | 1        | -        | -        | -       | 1        | -       | n/r    | n/r   | ı/u | n/r |     |
| Q2/2012-2013 | Required   | <b>+</b> | 1        | -        | -        | -       | 1        | -       | n/r    | 1     | ı/u | n/r |     |
|              | Done   | 1        | 1        | 1        | 1        | 1       | 1        | 1       | n/r    | 1     | n/r | n/r |     |
| Q3/2012-2013 | Required   | 1        | 1        | 1        | 1        | 1       | 1        | -       | n/r    | n/r   | n/r | n/r |     |
|              | Done   | 1        | 1        | -        | -        | -       | 1        | +       | n/r    | n/r   | n/r | n/r |     |
|              |  |          |          |          |          |         |          |         |        |       |     |     |     |

|                                  |     |   |     |     | Qu  | arterly ( | Complia | Quarterly Compliance Rate | te    |       |     |     |     |                      |
|----------------------------------|-----|---|-----|-----|-----|-----------|---------|---------------------------|-------|-------|-----|-----|-----|----------------------|
| Period Ag Cd                     |     | 3 |     | ప   | 75  | Pb        | ï       | Zn                        | CN(A) | CN(T) | OTT | BOD | 624 | Compliance<br>Status |
| 04/01/11 to 100 100 1            | 100 |   |     | 100 | 100 | 100       | 100     | 100                       | n/r   | 100   | n/r | n/r |     | Full<br>Compliance   |
| 07/01/11 to 100 100 10           | 100 |   | 7   | 100 | 100 | 100       | 100     | 100                       | n/r   | n/r   | n/r | n/r |     | Fuli<br>Compliance   |
| 10/01/11 to 100 100 100          | 100 |   | 10( | )   | 100 | 100       | 100     | 100                       | n/r   | 100   | n/r | n/r |     | Full<br>Compliance   |
| 01/01/12 to 100 100 100 100      | 100 |   | 10( | )   | 100 | 100       | 100     | 100                       | n/r   | n/r   | n/r | n/r |     | Full<br>Compliance   |
| 04/01/12 to 100 100 100 06/30/12 | 100 |   | 100 | 0   | 100 | 100       | 100     | 100                       | n/r   | 100   | n/r | n/r |     | Full<br>Compliance   |

|                          |     |   |     |     | Qu  | arterly ( | Somplia | Quarterly Compliance Rate | te             |       |     |     |     |                      |
|--------------------------|-----|---|-----|-----|-----|-----------|---------|---------------------------|----------------|-------|-----|-----|-----|----------------------|
| Period Ag                | Ag  |   | PS  | Cr  | Cu  | В         | ï       | Zn                        | Zn CN(A) CN(T) | CN(T) | OTT | BOD | 624 | Compliance<br>Status |
| )7/01/12 to 100 09/30/12 | 100 |   | 100 | 100 | 100 | 100       | 100     | 100                       | n/r            | n/r   | n/r | n/r |     | Full<br>Compliance   |
| 10/01/12 to 100          |     | , | 100 | 100 | 100 | 100       | 100     | 100                       | n/r            | 100   | n/r | n/r |     | Full<br>Compliance   |
| 01/01/13 to 100 03/31/13 |     | Ò | 100 | 100 | 100 | 100       | 100     | 100                       | n/r            | n/r   | n/r | n/r |     | Full<br>Compliance   |

Custom Enamelers complied consistently with the requirements to conduct self-monitoring and submit self-monitoring reports during all quarters from April 01, 2011 to March 31, 2013.

# VI. SELF-MONITORING REQUIREMENTS



# A. SUMMARY

Based upon a review of the wastewater generating operations, existing pretreatment equipment, past compliance history and previous enforcement actions, the following self-monitoring requirements have been established in accordance with OCSD's policies and procedures:

Table VIII-1 - Summary of Self Monitoring Requirements

| Constituent          | Test<br>Frequency | Requirement<br>Basis | Sample<br>Type | Start Date | End Date   | SMR Reason |
|----------------------|-------------------|----------------------|----------------|------------|------------|------------|
| 624                  | Semi-<br>Annually | Non Standard         | Grab           | 6/1/2013   | 05/31/2015 | ROUTINE    |
| CN(T)                | Semi-<br>Annually | Standard             | Grab           | 1/1/1992   |            | STANDARD   |
| Cadmium              | Quarterly         | Standard             | Composite      | 1/1/1992   |            | STANDARD   |
| Chromium             | Quarterly         | Standard             | Composite      | 1/1/1992   |            | STANDARD   |
| Copper               | Quarterly         | Standard             | Composite      | 1/1/1992   |            | STANDARD   |
| Lead                 | Quarterly         | Standard             | Composite      | 1/1/1992   |            | STANDARD   |
| Nickel               | Quarterly         | Standard             | Composite      | 1/1/1992   |            | STANDARD   |
| Silver               | Quarterly         | Standard             | Composite      | 1/1/1992   |            | STANDARD   |
| Total Toxic Organics | Semi-<br>Annually | Standard             | Grab           | 1/1/1992   |            | STANDARD   |
| Zinc                 | Quarterly         | Standard             | Composite      | 1/1/1992   |            | STANDARD   |

# B. BASIS FOR ESTABLISHING SMR REQUIREMENTS

# **▶** Standard Requirements

The standard self-monitoring requirement is the minimum required for all categorical permittees. Constituents with standard requirements are identified in Table VIII-1 under the column heading "Requirement Basis". OCSD has established the following minimum requirements for all permittees under the category shown in the following table:

Table VIII-2 – Standard Self-Monitoring Requirements for

METAL FINISHING PSNS category

| Constituent          | Test Frequency | Sample Type |  |
|----------------------|----------------|-------------|--|
| CN(T)                | Semi-Annually  | Grab        |  |
| Cadmium              | Quarterly      | Composite   |  |
| Chromium             | Quarterly      | Composite   |  |
| Copper               | Quarterly      | Composite   |  |
| Lead                 | Quarterly      | Composite   |  |
| Nickel               | Quarterly      | Composite   |  |
| Silver               | Quarterly      | Composite   |  |
| Total Toxic Organics | Semi-Annually  | Grab        |  |
| Zinc                 | Quarterly      | Composite   |  |

# ► Non-Standard Requirements

The non-standard self-monitoring requirements exceed the minimum requirements for constituents and/or sampling frequency. These are identified in Table VIII-1 under the column heading "Requirement Basis". The non-standard requirements are summarized in Table VIII-3 below:

Table VIII-3 - Non-Standard Self-Monitoring Requirements

| Constituent | Test Frequency | Sample Type |
|-------------|----------------|-------------|
| 624         | Semi-Annually  | Grab        |

The self-monitoring requirements are established during the next permit period for these reasons: TTO requirement added manually.



# A. SUMMARY

| Ordinal | Condition                 | Due Date(s) | Attachment(s) |
|---------|---------------------------|-------------|---------------|
|         | Self-Monitor Requirements | by policy   | A (F100)      |
| 1       | No Special Conditions     | -           |               |
|         | Rationale:                |             |               |

# B. DETAIL OF NON-STANDARD CONDITIONS

<none>

# C. DETAIL OF NON-STANDARD ATTACHMENTS

<none>

# Walker, Tom

From:

Walker, Tom

Sent:

Monday, May 06, 2013 11:05 AM

To:

Sohanaki, Roya; Foley, Tim (TFOLEY@OCSD.COM)

Subject:

FW: Spent Phosphate Solution

FYI – I will update the PPIR/Permit/cover letter.

TW

From: Walker, Tom

Sent: Monday, May 06, 2013 10:58 AM

To: 'Daryl Folmer'

Subject: RE: Spent Phosphate Solution

Thanks Daryl, I got that one wrong in my notes.

Tom

From: Daryl Folmer [mailto:daryl.cei@sbcglobal.net]

Sent: Monday, May 06, 2013 11:00 AM

To: Walker, Tom

Subject: RE: Spent Phosphate Solution

Hi Tom,

Is waste hauled by World Wide Env.

Regards,

# Daryl Folmer

Custom Enamelers, Inc. 18340 Mt. Baldy Circle. Fountain Valley, CA 92708

**DIRECT: 714-540-7885**Office: 714-540-7884
Fax: 714/540-1749
C: 714-231-9175

From: Walker, Tom [mailto:TWALKER@OCSD.COM]

Sent: Monday, May 06, 2013 9:18 AM

**To:** 'daryl.cei@sbcglobal.net' **Subject:** Spent Phosphate Solution

Hi Daryl,

My supervisor wants clarification as to how this spent process solution is handled, as I recall you said it is periodically discharged to the sewer but our records indicate that it's wastehauled. Could you please let me know about that when you have the chance.

Thanks,

Thomas J. Walker

OCSD, Industrial Source Control (714) 593-7440 direct